

Remarks/Arguments:

Claims 23 - 42 are pending.

35 U.S.C. § 102

Claims 23 - 25, 33 - 35, and 37 - 42 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,409,750 to Hyodoh et al. Applicants respectfully traverse the rejection of these claims and respectfully submit that these claims are patentable over Hyodoh for at least the reasons set forth below.

Independent claim 23 recites features that are neither disclosed nor suggested by Hyodoh, namely:

A process for constructing a braided stent having at least two regions, each region comprising a discrete plurality of filaments, the process comprising the steps of: (a) braiding first sections of a first discrete plurality of filaments to form *a first region* using *a first braiding machine* for accommodating at least a first number of bobbin carriers; (b) braiding second sections of the first plurality of filaments together with a second discrete plurality of filaments to form *the second region* using *a second braiding machine* for accommodating at least a second number of bobbin carriers ***that is different from the first number.***

In contrast, Hyodoh neither discloses nor suggests the use of a first braiding machine for accommodating a first number of bobbins to create one section of the braided stent, and a second machine for accommodating a second number of bobbins to create another section. In fact, Hyodoh implies the use of two *identical* machines for construction of the stent. More specifically, once the legs have been weaved, one of the weaving machines used to weave one of the legs may be utilized to continue weaving the common body of the stent. Hyodoh, column 16, lines 45 - 47.

Applicants' claimed process of creating a stent using two different machines, each for accommodating a different number of bobbin carriers, provides advantages over the process of Hyodoh. More specifically, Applicants' process results in a stent having a unique structure. For example, the process of using multiple machines having different numbers of carriers may be used to create a stent having a 1:1 braiding ratio throughout, a 2:2 ratio throughout, or a 2:2 ratio in the legs and a 1:1 ratio in the trunk. Specification as filed, page 21, lines 1 - 5. This can be contrasted with the exemplary process described in Applicants' specification for using the same machine for the legs and the trunk, in which the braiding machine at full capacity is used for braiding the trunk section and at half capacity for braiding each leg. This single-

machine process results in each leg having a 1:1 ratio (Page 14, lines 8 - 17) and the trunk having a 2:2 ratio. Specification as filed, page 19, lines 29 - 31.

In other words, the single-machine process as disclosed by Hyodoh inherently produces a stent with a different structure than is produced by Applicants' claimed multi-machine process. An exemplary unique structure created using Applicants' multiple-machine process comprises a bifurcated stent having a 1:1 braiding ratio in at least one of the legs and the trunk. Such a stent has greater stability of the braid mesh and consequently greater strength and stability of the overall stent as compared to the Hyodoh stent having a 2:2 ratio in the trunk and a 1:1 ratio in the legs. Filaments are interlocked most tightly when braided in a 1:1 ratio. Whereas Applicants' claimed multi-machine process provides flexibility to construct stents with a 1:1 ratio throughout, a 2:2 ratio throughout, or other designs, the method disclosed by Hyodoh necessarily limits the universe of braiding ratios. Accordingly, Applicants' novel claimed process achieves a unique and desirable stent structure.

Because Hyodoh neither discloses nor suggests the use of a first braiding machine for accommodating a first number of bobbins to create one section of the braided stent, and a second machine for accommodating a second number of bobbins to create another section, it fails to disclose or suggest each and every element of Applicants' claimed invention.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that independent claim 23 is patentable over Hyodoh and should be allowed. Claims 24, 25, 33 - 35, and 37 - 42 are dependent upon claim 23. Therefore, claims 24, 25, 33 - 35, and 37 - 42 should also be allowed at least as dependent upon an allowable base claim. Reconsideration of these claims is respectfully requested.

35 U.S.C. § 103

Claims 26 - 32 and 36 (all ultimately dependent upon claim 23) stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hyodoh. Applicants respectfully traverse the rejection of these claims and respectfully submit that these claims are patentable over the art of record for at least the reasons set forth below.

As explained above, independent claim 23 recites features that are neither disclosed nor suggested by Hyodoh.

The Office Action states that Applicants' process would have been an obvious matter of design choice to use three machines. However, Applicants have explained above that (1) Applicants' process and the process of Hyodoh *clearly do not* produce the same stent, and (2) Applicants' process achieves unique and desirable stent structures not possible utilizing the process of Hyodoh (such as, for example, a 1:1 braiding ratio throughout the stent). The use of

three machines permits, for example, braiding the trunk and both legs of a bifurcated stent in a 1:1 ratio, even where one leg comprises a different number of filaments than the other. See specification as filed, page 20, lines 12 - 24. Thus, contrary to the rejection set forth in the Office Action, Applicants have disclosed how using three machines solves a problem and has a particular purpose, and Applicants have further clarified how a three-machine process can produce a different bifurcated stent than a two-machine process.

The Office Action points to no suggestion or motivation in the references nor motivation known to those skilled in the art to modify the process disclosed by Hyodoh to use machines with different numbers of bobbins, for any reason. Hyodoh does not discuss braiding ratios at all, let alone taking steps in the manufacturing process to create the stent with certain braiding ratios in certain sections of the stent. Accordingly, the Office Action has cited no reference indicating that others skilled in the art even contemplated the effects of the braiding ratio on an resulting stent.

Because claims 26 - 32 and 36 (all of which are ultimately dependent upon claim 23) include limitations that are neither disclosed nor suggested by Hyodoh, and because Applicants have articulated advantages to the claimed invention not contemplated in the prior art, Applicants' claimed process is not an obvious matter of design choice. Accordingly, Applicants respectfully submit that claims 26 - 32 and 36 should be allowed for at least all of the reasons set forth above. Reconsideration of these claims is respectfully requested.

Conclusion

In view of the amendments and points of distinction set forth above, Applicants contend that the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,
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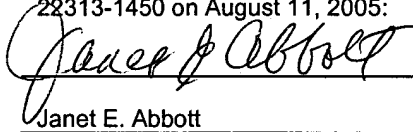
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